



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,831	09/09/2003	William E. Bostick	048195-0119	1748
23428 7590 05/02/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER JOHNSON, MATTHEW A				
ART UNIT 3682		PAPER NUMBER		
MAIL DATE 05/02/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/657,831

Applicant(s)

BOSTICK ET AL.

Examiner

MATTHEW JOHNSON

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 28 January 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-22 and 24 is/are pending in the application.
4a) Of the above claim(s) 8-14 and 16-20 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) 1-7, 21, 22 and 24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 25 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 21, 22 and 24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ochiai et al. (USPGPub-2002/0023517) in view of Sasaki Keiichi (JP-2002154439).

Re clms 1 and 22: Ochiai discloses a steering wheel (1) comprising:

- A metal core member (11) comprising a substantially circular rim (11 is formed into a circular rim; Fig. 1, [0045] and [0051])
- At least one dampening element (W1) secured about or within said rim in vibrational communication therewith, said dampening element comprising a periphery
- A sleeve (W2) encapsulating said dampening element, thereby covering the dampening element within said steering wheel (Fig. 11)
- A material (12) covering the rim and the at least one dampening element
- Wherein the dampening element and the sleeve are secured within a portion of the rim (Fig. 11)

Ochiai does not disclose at least one spring member extending about said periphery thereby supporting said dampening element.

Keiichi teaches at least one spring member (3) extending about a periphery of a dampening element (2) thereby supporting said dampening element for the purpose of coupling the inside surface of the sleeve (1) resiliently with the dampening element (2) such that the dampening element and the spring element constitute a spring-mass system for exerting a vibration controlling function (see Abstract).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the device of Ochiai to include at least one spring member extending about said periphery thereby supporting said dampening element, as taught by Keiichi, for the purpose of coupling the inside surface of the sleeve resiliently with the dampening element such that the dampening element and the spring element constitute a spring-mass system for exerting a vibration controlling function (see Abstract).

Regarding the limitation "the at least one spring member is secured within a portion of the rim", the modification above would result in such a configuration, since the sleeve and dampening element of Ochiai are disposed in the rim, the addition of the spring member around the periphery of the dampening element taught by Keiichi would also be within a portion of the rim. With regards to claim 22, such a modification would also result in the sleeve of Ochiai being positioned about said dampening element (W1) and the spring member of Sasaki, thereby covering the dampening element and the at least one spring member.

Re clm 2: Keiichi further discloses a plurality of spring members (3) symmetrically oriented (Figs. 1 and 2) about said dampening element (2).

Re clm 3: Keiichi further discloses the spring member (3) is an O-ring (Fig. 3).

Re clm 4: Keiichi further discloses the plurality of spring members (3) is a plurality of O-rings (Figs. 1-3).

Re clm 5: Ochiai discloses a steering wheel (1) wherein said dampening element has a density greater than the density of said core member ([0123] line 2, [0058], Note: W1 is formed from lead-density = 11.34 g/m^3 and 11 is formed from steel-density = 7.87 g/m^3)

Re clm 6: Keiichi further discloses the spring member (3) is formed from a resilient material (See Abstract).

Re clm 7: Ochiai discloses the substantially circular rim (11) comprises a channel (B) substantially complementary with said dampening element (w1).

Re clm 21: Ochiai discloses a steering wheel (1) wherein the material (12) covering the rim (11) and the dampening element (W1) is elastomeric foaming material ([0096]).

Re clm 24: Ochiai discloses a portion of the material (12) covering the rim and the at least one dampening element is secured within a portion of the rim. (See Fig. 3, where a portion of the rim 11 has a concavity 35 where foam settles. Additionally, a portion of the foam is within the inner perimeter of the rim 11)

Response to Arguments

3. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections

are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that the annular mass (2) of Keiichi is not analogous to the dampening element, the wheel case (1) is not analogous to the sleeve of claim 1, and that incorporating the teachings of Keiichi into Ochiai would destroy the device.

The primary reference, Ochiai, discloses both a dampening element (W1) and a sleeve (W2). The secondary reference, Keiichi is relied upon for his teaching of a spring member (3) extending about a periphery of a dampening element (2). The annular mass (2) is clearly a dampening element, as Keiichi discloses that the elements (2 and 3) form a dynamic damper mechanism consisting of a spring-mass system (English Abstract). The dampening element (W1) of Ochiai is disposed within the rim (11), thus one of ordinary skill in the art incorporating the teachings of Keiichi would realize that the spring member would also be disposed within the rim.

Regarding the term "sleeve", Merriam Webster's Collegiate Dictionary *tenth edition* provides the following definition for the term sleeve: "a tubular part designed to fit over another part". The wheel casing (1) of Keiichi meets the broadest reasonable interpretation of "a sleeve".

Additionally, incorporating the teachings of Keiichi into the device of Ochiai would not destroy the device because the device would still perform the primary function and achieve the predictable result of dampening and absorbing vibrations of the steering wheel. Therefore, the combination of Ochiai and Keiichi anticipate the claim.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MATTHEW JOHNSON** whose telephone number is (571)272-7944. The examiner can normally be reached on Monday - Friday 8:30a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. J./
Examiner, Art Unit 3682

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3682